

BOARD OF ALDERMEN
AGENDA ITEM ABSTRACT

ITEM NO. D(4)

MEETING DATE: March 1, 2005

TITLE: Update on the Alternative Design for the Smith Level Road Project

DEPARTMENT: PLANNING	PUBLIC HEARING: YES ___NO__X__
ATTACHMENTS: <ul style="list-style-type: none">A. ResolutionB. Adopted Resolution – March 18, 2003C. Project Chronology – 1985 to 2005D. Revised NCDOT Traffic ForecastE. Review by NCDOT Congestion Management SectionF. Project MapG. Four-lane Cross-sectionH. Two-lane Cross-sectionI. Map Showing Existing Right-of-Way and Typical Cross-Section	FOR INFORMATION CONTACT: Dale McKeel – 918-7329

PURPOSE

At its meeting on January 18, the Board of Aldermen discussed an alternative to the four-lane widening project for Smith Level Road between Morgan Creek and Rock Haven Road. At that meeting the Board requested additional information regarding the amount of right-of-way needed for the alternative and the cost of acquiring this right-of-way. This purpose of this agenda item is to provide an update on information received from NCDOT since the January 18 meeting. A resolution receiving the report is provided for the Board's adoption (Attachment A).

UPDATE

Below is a summary of the updated information provided by NCDOT since the January 18 meeting:

1. Map of Existing Right-of-Way. NCDOT has provided to the Town a map showing the existing right-of-way on Smith Level Road between Morgan Creek and Rock Haven Road (Attachment I). The right-of-way width varies from 94 feet to 60 feet. The map also provides a typical cross-section for the alternative.

2. Meeting to Review Right-of-Way in the Field. NCDOT and Town staff met on Tuesday, February 8 to discuss the right-of-way needed for the alternative. The purpose of this meeting was to review in the field the typical cross-section and available right-of-way to get a better sense of where additional right-of-way may be needed. Town staff provided an oral report at the February 8 Board of Aldermen meeting which noted the following:
 - It will not be possible to determine the total amount of right-of-way needed for the project until design drawings are prepared. At intersections, for instance, there will be additional turn lanes beyond what is shown on the typical cross-section.
 - When the total amount of right-of-way needed for the project has been determined, NCDOT will provide to the Town an estimate of the cost of acquiring the right-of-way. However, the actual acquisition cost will be determined through negotiation with landowners or condemnation proceedings, and may vary significantly from the estimate.
3. Right-of-Way Estimate. On February 18, Division Engineer Mike Mills provided an estimate for the Town's cost of purchasing right-of-way. The estimate stated that the cost would be in a range from \$270,000 to \$320,000. He said that once a design is prepared and the right-of-way is staked, the cost could be less. The cost could also be reduced by using construction easements in some locations rather than purchasing right-of-way.
4. Utility Relocation Costs. In addition to right-of-way costs, the Town of Carrboro would be responsible for utility relocation costs under the NCDOT alternative to the TIP project. As reported to the Board on February 8, the meeting with NCDOT determined the following:
 - Existing water and sewer lines will need to be assessed to determine what needs to be relocated.
 - Several utility poles will need to be relocated
 - NCDOT may have prepared some utility information for the four-lane project.

On February 24, Mr. Mills stated that NCDOT will probably not be able to provide an estimate of utility relocation costs until the design has been prepared. He stated that he did not believe that water, sewer, and gas lines would need to be relocated, and that utility poles would need to be relocated at the cost of the utility if the poles were in the existing right-of-way under an encroachment permit with NCDOT. He said there was not any utility information available that had been prepared for the four-lane project.

5. Amortization of Costs. On February 8, Alderman Alex Zaffron asked whether NCDOT would allow the Town to repay the cost of right-of-way and utility relocation over a number of years. On February 24, Mr. Mills said that NCDOT would allow the Town to

spread the cost over three years and might be willing to go up to five years, and that interest would not be charged under such an arrangement.

6. Use of Sidewalk Bond Funds. On February 8, Alderman Mark Chilton asked if the Town could use sidewalk bond funds to pay for the sidewalks in the project in exchange for NCDOT using an equal amount of Moving Ahead (or other state funds) to purchase right-of-way. Mr. Mills stated that he has requested an opinion from Assistant Secretary of Transportation David King on whether this would be allowed.

INFORMATION

Note: This is the same information presented to the Board of Aldermen on January 18, 2005.

The N.C. Department of Transportation (NCDOT) held a public hearing on the proposed widening of Smith Level Road on October 25, 2001. The plan presented to the public showed Smith Level Road being widened to four lanes with an 18-foot median, curb and gutter, and bike lanes and sidewalks on both sides of the road.

Approximately 50 persons attended the open house and public hearing in addition to NCDOT and Town of Carrboro staff. Many of those present expressed support for the bike lanes, sidewalks, and crosswalks, but there were major points of contention. Several residents questioned the need for the project and stated that the focus should be on addressing current problems on Smith Level Road, including timing of signals, speeding, ingress/egress problems at Frank Porter Graham school, and the need for better pedestrian and bike connections to the school and across Morgan Creek.

In response to citizen and Town comments during and following the public hearing, NCDOT prepared additional information on the project. There were also several meetings between NCDOT staff, Town staff, and Board of Aldermen members to discuss the project.

On March 18, 2003, the Board of Aldermen adopted a resolution requesting that the N.C. Department of Transportation consider an alternative design for the proposed modifications to Smith Level Road between Morgan Creek and Rock Haven Road (Attachment B). The adoption of this resolution followed a joint worksession that was held on October 15, 2002 with the Transportation Advisory Board (TAB) to meet with NCDOT staff and review the information that has been compiled.

On January 5, 2005, there was a meeting between town officials, NCDOT staff, and Board Member Doug Galyon to discuss the project. NCDOT staff stated that their continued support for a four-lane, median divided design, but proposed the following alternative design:

We propose to widen the existing pavement to provide 12' lanes with a 2' paved shoulder on the east side; a 4' bike lane with curb and gutter on the west side; right turn lanes NB at Culbreth Road and SB at Rock Haven Road and a left turn lane on NB Smith Level at Rock Haven Road. A sidewalk could also be

constructed on the west side adjacent to the curb and gutter. Additional right of way and utility relocation will be required throughout the limits of this project.

Attachment C provides a chronology of the Smith Level Road project from 1985 to 2005. Attachment F is a map showing the beginning and ending points for the project.

OPTIONS FOR CONSIDERATION

Town staff have identified three options for consideration by the Board of Aldermen.

OPTION 1: ACCEPT THE PROPOSED FOUR-LANE, MEDIAN-DIVIDED DESIGN.

The Board of Aldermen's first option is to accept the design proposed by NCDOT. A cross-section of this design is shown in Attachment G. Much of the design work for the project has already been completed and right-of-way acquisition was scheduled to begin this fiscal year. Selection of this option would allow NCDOT staff to finish the design work and begin the process of right-of-way acquisition and construction.

Please note that the Board of Aldermen on June 27, 2000 adopted a resolution endorsing a four-lane median divided road with bike lanes and sidewalks. However, the only other choice presented to the Town at that time was a five-lane roadway (two lanes in each direction with a center two-way left-turn lane).

NCDOT's preference for a four-lane design is based on the traffic projections for the year 2025. The most recent traffic projections developed by NCDOT indicate that 24,800 vehicles per day will travel on Smith Level Road in 2030 in the section between Willow Oak Drive and BPW Club Road. NCDOT staff generally recommend a four-lane roadway when daily traffic volumes exceed a certain number, such as 18,000 vehicles per day.

Attachment D provides a revised traffic forecast for Smith Level Road in the year 2030. Attachment E is a review of the revised traffic forecast by NCDOT's Congestion Management Section. Please note in Attachment E that based upon the projected traffic volumes, NCDOT staff recommend a four-lane divided roadway as the typical cross-section for the Smith Level Road project.

If this option is selected, it is anticipated that right-of-way acquisition would begin in August 2005 and construction would begin in August 2006. It is likely that construction would not be completed before the target opening date for the Carrboro High School in August 2007.

OPTION 2: ACCEPT NCDOT'S ALTERNATIVE PROPOSAL

The Board of Aldermen's second option is to accept the alternative design proposed by NCDOT. A cross-section of this design is shown in Attachment H. Please note that NCDOT's alternative would be funded with state Moving Ahead funds rather than from the Transportation Improvement

Program. If this option is chosen, the four-lane median divided project would need to be removed from the Transportation Improvement Program so that the alternative design could move forward.

A major consideration in selecting NCDOT's alternative is the right-of-way and utility relocation costs for the project. NCDOT typically does not purchase right-of-way or relocate utilities for Moving Ahead projects; these activities are typically borne by the local government. It is estimated that the right-of-way and utility relocation costs for NCDOT's alternative are in the range of \$300,000.

With the four-lane, median-divided project, NCDOT estimates that \$600,000 will be needed for right-of-way and \$2.4 million for construction. The estimated cost of constructing NCDOT's alternative is \$1.3 million. In light of the \$1.7 million cost savings if the Town chooses NCDOT's alternative, the Mayor and Town Manager on January 5 requested that NCDOT purchase needed right-of-way for the project, but were told that NCDOT typically does not purchase right-of-way for Moving Ahead projects.

Also note that NCDOT's alternative proposal would only provide sidewalk on the west side of Smith Level Road, whereas sidewalks on both sides would be provided with the four-lane, median-divided project. At the current time, NCDOT does not have confirmation that funding is available for the sidewalk.

As proposed, NCDOT's alternative would not provide a standard four-foot bike lane on the east side of the road. However, initial conversations with NCDOT staff indicate that the design can likely be changed to provide bike lanes on both sides of Smith Level Road.

In consideration of this option, the Board of Aldermen should also note the following language included as part of the revised NCDOT traffic forecast (Attachment E):

Smith Level Road is functionally classified as a minor arterial *not* of regional or statewide significance. Regional travel into and out of Chapel Hill and Carrboro would be better served on US 15-501. From a planning perspective, limiting the number of lanes for use by automobiles is more consistent with the Town's walkable community goals. We have attached a March 18, 2003, resolution from the Town of Carrboro which describes their goals in more detail. However, we also recommend that NCDOT receive some assurance from the Town of Carrboro that the Town will accept a context sensitive solution which may not meet the long term vehicular mobility needs in the area. NCDOT should also challenge the Town to implement planned travel demand management measures in the corridor as a means to limit growth of automobile trips on Smith Level Road, with a focus on reducing automobile trips to the elementary school. A system of bicycle facilities that provide continuous routes to the UNC campus, sidewalks along neighborhood roadways which connect to Smith Level Road, and convenient transit stops should be constructed by the Town of Carrboro within five years. The Town's land use plan should also allow neighborhood-scale commercial development along Smith Level

Road to offer convenient services within walking and biking distance of surrounding residential neighborhoods.

Under this option, NCDOT would manage design and construction. NCDOT staff indicated that they thought it was feasible to complete the work before the target opening date for the Carrboro High School in August 2007. However, this is also contingent on the Town of Carrboro acquiring any needed right-of-way for the project.

OPTION 3: DISCONTINUE WORK ON THE PROJECT

The Board of Aldermen's third option is to request that NCDOT discontinue work and drop the project. However, there is a strong need and public support for bike lanes, sidewalks, and other pedestrian improvements along Smith Level Road. There will also be a need for intersection improvements along Smith Level Road in the future. If the project is dropped, it is unclear how needed bike facilities, pedestrian facilities, and intersection improvements will be provided.

OTHER ISSUES FOR CONSIDERATION

If either Option 1 or Option 2 is chosen, there are several other issues that need to be discussed with NCDOT staff and addressed as part of the final design for the project. These issues have been raised at public meetings, in meetings with NCDOT staff, and by the Transportation Advisory Board. In conjunction with the final decision about the cross-section, careful consideration of these issues will be needed. The following is a list of some of these issues:

- Include improvements to the operation of the interchange at Smith Level Road and NC 54 Bypass as part of the project.
- Consider extending the right southbound lane across the bridge to Willow Oak Lane, as proposed by the Berryhill neighborhood in its presentation to the TAB.
- Add bikelanes and sidewalks to the east side of the existing bridge over Morgan Creek on Smith Level Road and other bicycle and pedestrian improvements in the vicinity of NC 54.
- Ensure that emergency response and public safety needs are addressed in the design.
- Use recycled materials in all aspects of the project.
- Review the design to ensure a safe and functional pedestrian environment along Smith Level Road.
- Incorporate recommendations from the traffic operations study at the Frank Porter Graham site.
- Coordinate signal timing on Smith Level Road.
- Incorporate additional landscape plantings into the project.
- Replace any fencing removed by the project.

FISCAL IMPACT

If Option 1 is chosen, Carrboro will be responsible for paying 30 percent of the construction cost for new sidewalks constructed within the town limits or extra-territorial jurisdiction area. However, funding of \$66,300 was included in the sidewalk bond program for the Town's share of providing sidewalk along Smith Level Road.

If Option 2 is chosen, the Town of Carrboro will be responsible for securing needed right-of-way for the project and paying for utility relocation, and it is estimated that these costs are in the range of \$300,000. A source for these funds has not been identified.

STAFF RECOMMENDATION

Staff recommends that the Board of Aldermen adopt the attached resolution receiving the report (Attachment A).

Please note that if the Board is interested in selecting Option B, Town staff recommends that the Board of Aldermen request that the project not be removed from the state TIP until (1) the Town and NCDOT have executed a municipal agreement for the work, (2) the Town receives detailed estimates of the cost of right-of-way and utility relocation, and (3) the Town receives confirmation that NCDOT funding is available for the sidewalk.